



# **NATURAL RESOURCES COMMITTEE**

## **DRAFT MURRAY DARLING BASIN PLAN**

Terrace Room West, Parliament House, Adelaide

Tuesday 21 February 2012 at 9:35am

**(OFFICIAL HANSARD REPORT)  
PARLIAMENT OF SOUTH AUSTRALIA**

MEMBERS:

Hon. S.W. Key MP (Presiding Member)  
Hon. J.S.L. Dawkins MLC  
Hon. G.A. Kandelaars MLC  
Mr G.G. Brock MP  
Mr L.K. Odenwalder MP  
Mr D.W. Pegler MP

WITNESS:

GEOFF BROCK, Member for Frome, [geoff.brock@parliament.sa.gov.au](mailto:geoff.brock@parliament.sa.gov.au), called and examined:

44 The PRESIDING MEMBER: I do not think I need to read you the Presiding Member's statement, Mr Brock.

Mr BROCK: No, I'm fine.

45 The PRESIDING MEMBER: Thank you very much. I am really appreciative of the fact that you have made a submission. Thank you for doing that. I think it is really important that we get as many members within the state parliament to contribute to what the state parliament position may be. Please go ahead. We will accept your hard copy.

Moved Mr L.K. Odenwalder

Seconded Mr D.W. Pegler

Carried.

Mr BROCK: Thank you, Madam Chair, and thanks to the committee for the opportunity to comment on the Draft Murray-Darling Basin Plan. First, I acknowledge that I am also a member of the Natural Resources Committee and I am doing this as the elected member for Frome, not as a committee member on this occasion. I also want to acknowledge all the other previous speakers and, while everybody has been discussing the actual plan itself, the purpose of my presentation is to look at some suggested alternatives in addition to the plan: to solicit support for the development of a business case to explore the possibility of a viability of moving water from the north of our continent to the south part of our continent.

At the end of this presentation, there is a very short video. I have to tell the members and the committee that it is a very amateur one. We were going to get it done professionally and it was going to cost nearly \$12,000, so we have elected to do it within our own resources. Volunteers from my office did this—out of hours might I add. It is an overview of a proposal.

46 The PRESIDING MEMBER: It has just missed the short film festival.

Mr BROCK: Exactly right but it may have got an Oscar. I have reinforced this before. Unlike metropolitan Adelaide, many regional centres do not have access to water storage facilities such as reservoirs to supplement their off take from the Murray-Darling system. Indeed, even a desalination plant has been commissioned to aid Adelaide's water sustainability.

The regional centres of the Upper Spencer Gulf—and people call it the Iron Triangle, but it is now called the Upper Spencer Gulf—the cities of Port Augusta, Port Pirie and Whyalla, rely 100 per cent on the water from the River Murray which is supplied by the Morgan-Whyalla pipeline. Not only are these cities and their populations reliant on the water from the River Murray, the predicted mineral resource boom is set to take hold in the top end of our state. That region is also reliant on water for their opportunities up there. It has been said that the opportunity for the mineral resource sector is going to be the saviour of our state in the long term, and they need to have power and water.

I do not think that people really appreciate the potential danger that if we do not get this Murray-Darling draft plan correct, as Dean Brown indicated before, and if we do not look outside the square, I do not think that people realise the consequences that could happen for people living in South Australia. Currently, the mining operations are extracting significant amounts for their water requirements from underground aquifers such as the Great Artesian Basin. These precious resources have taken millions of years to amass their water in those facilities. The practice of extracting water at a much faster rate than is possible to recharge these systems is quite simply not sustainable or renewable.

The draft plan suggests an environmental flow of 2750 gigalitres as required while many, including the Wentworth Group of Concerned Scientists, suggest that a figure nearer to 4,000 gigalitres is needed to ensure the river is a healthy system. As Dean Brown has indicated, the allocation is set at 75 per cent, and that is all from entitlements. I understood what Dean was saying: if that is set, we only get 75 per cent of the 2750 gigalites. I might have that wrong but it is certainly a very interesting comment from Dean Brown.

If there are not sufficient flows to ensure the estimated two million tonnes of salt is not completely flushed through the system, then we as end users will suffer along with our precious environment. If this is not addressed, it may be an issue for the system as a whole. In other words, the decay will start from the southern end and eventually it will reach the top end of the eastern states if we are not careful. That is the issue I have.

With the additional water required for adequate environmental flows having to come from the existing available water in the system, then the current allocations for uses of this water must be further reviewed. We must note that under this plan, there will be no extra water in the basin to flush the system to provide for a healthier river. As I understand it, there is only a certain amount of river water in the whole system and, while we can release some extra there, there is no more than a set amount that comes in there.

This process will require further buybacks from the current users, which in turn will reduce activities in the regions, and these activities include food production which will impact all of us. I said a bit earlier during the questioning, if that happens, we can get produce from overseas, but the devastating effect on people in the Murray-Darling Basin is the vacant blocks of land that will start to devalue those that are left there which will have a consequence in the amount of money that the local councils can raise for their infrastructure.

I would also say that I am a previous mayor and councillor. I am very disappointed that, from the whole of South Australia, there have been only three submissions from local government to this committee—three of those—and one is from a council off the River Murray, that is, the District Council of Barunga West. I know that it takes a bit of time, but the people away from the River Murray need to put a submission in and need to voice their concerns about the health, vitality and viability of that river. If there is no comment coming into the system, then people making the decision will say there are no issues.

I would like to now have regard to the 'Water: science and solutions for Australia' report, which has been commissioned by the CSIRO. Whilst I will not table it at this stage—I can give you the link—it is 167 pages and from that I am just relating the suggestions, comments and recommendations from the CSIRO report which, I believe, is a very reliable and respected association.

To continue to increase agricultural productivity with limited water will require many innovations in policies and technology, and that has been mentioned by other speakers. The challenge for Australia is not only to deal with the current problems but also to prepare for the future. Demand for water will grow to support a population that is anticipated to increase by at least 50 per cent by the year 2050. The global demand for food is expected to double, plus growth in the mining and resource activities, not only in South Australia but in the Northern Territory and Western Australia.

Under Australia's constitution, water resources are the responsibility of the state and territory governments. The Australian government is involved through national competition policy, international environmental policy and management of water resources that cross state borders. As has been mentioned before, if this plan goes forward and is accepted in whatever form, then there will be one controlling body for the whole lot.

Another section of the CSIRO report states that, overall, Australia has significant water resources to support its current needs; however, we only consume 6 per cent of renewable water resources each year. The Murray-Darling is Australia's most developed rural water resource, where 48 per cent of surface water is consumed on average each year, mainly in the southern part of the basin.

For example, in the River Murray, a dry year produces approximately one tenth of the river flow of a wet year. So, what they are saying there is that, if we have a dry year—this is from the CSIRO—then we have only got one tenth of the water flowing. In the Murray-Darling Basin in the dry years, which have low flows, more than 60 per cent of the water available is used. After accounting for the need to leave sufficient water in the river to keep supplying downstream users, no further water could be used. This is from this report from the CSIRO.

The contrast of high levels of water use in some basins with low levels of use elsewhere raises the prospect of increasing use by transferring water between the river basins. The Snowy Mountains Scheme already transfers approximately 1,000 gegalitres a year from the Snowy Mountains Scheme into the Murray-Darling Basin. Ambitious schemes, such as piping water from northern Australia to the Murray-Darling Basin, the Bradfield Scheme or a proposal to supplement Perth's dwindling surface water supplies with a canal from the Kimberley region, have all been suggested. This is on page 10 of that report.

A proposal to transfer water from the Clarence River into the Murray-Darling Basin would supply nearly 900 gegalitres; that is, 7 per cent of water use in the basin. So, that was one of the proposals and that is on page 10 of the report. Run-off from the two drainage divisions in the north is nearly eight times that of the Murray-Darling Basin. So, the run-off itself is nearly eight times that of the Murray-Darling Basin; that is on page 11 of the report.

Northern Australia has a hot climate with most rain falling from November to April, which is the summer period for the southern regions. As we all know, we have different climates and different opportunities; that is on page 11. During this four or five-month period it is estimated that 30,000 gegalitres runs out to sea and is not fully utilised.

Australia is only partly a dry continent. It is a continent with a very thin wet margin where most of the population lives, but it is also sparsely populated and uses only a small amount of its total water resources. There is more than enough water overall to meet the country's needs, yet the perception of aridity is real (page 15). Taking into account all the renewable water that is available and not fully utilised, we have enough here for more than our population.

There are opportunities to develop new water resources; however, in the past the price of water was a lot lower than it currently is now. This, together with larger amounts to be transferred than previously considered and the now higher price of water, makes the suggestion of developing new water resources far more attractive. A lot of these reports, including the GHD report, and others, were done some years ago when the price of water was a very small amount. The price of water down in this area now is very high, technology has changed and there are opportunities to be able to look at the issue. Also, the fact is that from the Kimberley to Perth they are looking only at transferring 400 gegalitres, and this proposal that we are suggesting could transfer 8,000 gegalitres from there; so, the unit price will be a lot less.

Groundwater use is increasing and is the main source of water for much of Australia's dry interior (page 47 of the report). Groundwater shares many of the same sustainability issues as surface water, with the added complication that over-use may not be detected for several decades because of slow renewable and movement of the resource (again, page 47). The recharge rate of the aquifers is the absolute maximum amount of groundwater that could be used sustainably, but in reality only a fraction of the recharge can be used in the long term all without impacts; and this is because extraction of groundwater can alter recharge, reduce discharge elsewhere or change the flow paths and water pressure through an aquifer (page 55).

It may take several decades for the watertable or water pressure response to spread across the whole aquifer, so consequences of pumping water may not be detected long after the water use has been established. Most of the 500 gegalitres per year used from the Great Artesian Basin is used for stock watering, but there are now new demands from the mining and the resource opportunities. We know that Olympic Dam at Roxby Downs is utilising from the Great

Artesian Basin. We know that OZ Minerals is doing it from another basin. They are allowed to take so much out, but we cannot continue to draw from these unlimited resources.

An extra 10 million to 20 million people could be living in Australia by 2050. That is part of the strategic plan going forward. Even in our state, South Australia, the plan states that we want to have another half a million people living in South Australia, which will require far more water supplies, more wastewater disposal and greater energy use (page 75 of the report). Australia's largest cities are forecast to require approximately 73 per cent more water supplies than is currently used; and, in addition, current supplies will probably reduce as a result of climate change, which will again require additional augmentation (page 89).

Their report also mentions the future of irrigation in the Murray-Darling Basin and states that, despite the strong prospects for irrigation produce, there are risks to future water availability for irrigation in the Murray-Darling Basin. River flows in the basin are predicted to decline by 11 per cent. The figure given in the report is 2,500 gigalitres per year under a mid-range projection of climate change by 2030. Other risks to future water availability include reductions to river flows from vigorous regrowth of forests from very large bushfires in north-eastern Victorian and southern New South Wales, farm dams and the increased use of groundwater.

I noticed in the paper this morning unsubstantiated comments about irrigators digging trenches in New South Wales and diverting off the river from the Murray-Darling Basin, and that has been captured by satellite. These could effectively reduce the river flows in the Murray-Darling Basin by a further 1,500 gigalitres a year by 2030. Whilst the amounts of water needed for environmental flows varies, depending on who you speak to, everybody has a different view. One thing is for certain: serious consideration is needed to fully investigate using existing water resources sustainably.

The issue I have is that we as politicians try to look at the long term, but unfortunately the politics have started to come into the draft Darling Basin report at the moment. We have an issue that is confronting Australia, in particular South Australia, and as legislators, as community people, as parents and grandparents, we have to start to think for the next 10, 15 to 20 years. People have said to me that we don't think outside the square. We have a great river there, the Murray-Darling Basin. When my dad was alive he said the Snowy Mountains scheme would never work. The Snowy Mountains scheme has worked. There are other opportunities. Technology is now changing.

We have, as a state, as a continent, as a nation, to start thinking really as one and not individually. I am happy to show this Oscar-winning DVD. It is not 100 per cent, but it is something we are trying to put across and to highlight the opportunities for bringing resources from somewhere else. Whilst it is controversial—people may not like it—we have to bring these things to the fore. If you get criticised for it, it's fine, but we have to take every opportunity to look at sustainability for this state, as we are the tail-end Charlie. I am happy to answer any questions after that.

*[Video shown]*

47 The PRESIDING MEMBER: Well done, Geoff.

Mr BROCK We put this out to the community and did a bit of local stuff in my region. The comments coming from all over Australia, from Polyline, other organisations, and engineers, are, 'At least look the opportunities and explore them.' As I said earlier, the price of water when first suggested—some people have discussed this for many years, including Bob Katter and others have done the same thing—maybe 70¢ a kilolitre and is now its between \$3 and \$5 and technology has changed. I'm happy to take any questions. Whilst it is not directly dissecting the draft basin plan, it is setting up an alternative. You can say no to something but, if you're going to say no something or questionnaire, you should be putting up an alternative or an alternative suggestion to be considered.

48 The PRESIDING MEMBER: As you said, Geoff, this is not something strictly within the inquiry before as, and I'm just wondering whether this is something we could also put on the agenda to discuss as something we might do more investigation into at a later stage in the committee on whether that is something the committee members would consider.

49 The Hon. J.S.L. DAWKINS: I am happy that we have a look at that later on. I take Geoff's point that a lot of the work was done when basic water prices were lower, and certainly there was some work done. Madam Chair, you might remember there was work done when the Alice Springs to Darwin line was being built on the possibility of bringing water down that same corridor. My memory is that at that stage the water that would be available in Adelaide as a result of that was going to be 10 times what SA Water was charging at the time. It may not be 10 times now but, if we are going to examine it, it would not hurt to dig out some of that stuff that would have been done. It was in the previous government, but it certainly wouldn't hurt to have a look at it.

50 The PRESIDING MEMBER: And also suggestions of witnesses you might like us to call. I think we can put a proposal on the agenda for a future meeting and make sure that we get everyone's reaction.

Mr BROCK: I agree, but in the consultation period I needed to bring this forward. I'm quite happy to discuss it further. To answer your comment, John, the idea of this is not to bring the water into Adelaide but to bring it into a particular point in a section of the Murray-Darling Basin and then use that as the flow. I only talked about water here, but, if I go into more detail, I have also talked to and had approaches from LNG Gas producers from Western Australia about bringing the Gas pipeline down through there at the same time to connect up east of the Moomba line. The other part of that is for renewable energy to be used for pumping the water into pumping stations and storage facilities.

51 Mr ODENWALDER: Bearing all that in mind and putting that proposal to one side, do you, as the local member for that area which is so reliant on the Murray, support the existing plan? Are you of the view, like so many others, that we go ahead with it and look at the targets in 2015 and all that sort of thing?

Mr BROCK: I have some concerns on the long-term viability of it. However, like Dean Brown indicated, I think we have to accept some sort of a plan to go forward and to review it. My concern is the politics that will be played going forward from different states, including this state. The other issue is that the time it comes into effect is 2019, and that is a long time off. So I do endorse the plan but it needs to have a lot of modifications going forward. At least, we need to get something on there to take it away from the individual states.

52 Mr PEGLER: Geoff, in the second-to-last dot point in your presentation you mention regrowth of forests. Something I have concerns with in the Murray-Darling Basin Plan is that it does not address, at all, changes of land use, particularly from grazing to forestry, and with the possibility of carbon offsets and vast areas of land being transferred from grazing to forests it could have a bigger effect on the Murray River than what we talk about with this 2,750, so I think it is something that must be taken into consideration. Probably in your report there, Geoff, it wouldn't hurt to add that bit in.

Mr BROCK: Good point, Don. I appreciate that, thank you.

53 The PRESIDING MEMBER: On behalf of the committee, can I thank you for your contribution. I think we agree that we should follow up on this particular initiative proposal of yours, put that on our agenda for further consideration, perhaps take some further evidence, and see what the committee might like to do with that as a contribution. I also ask that when we have the other committee members present who are not here, we might need to look at that film again, if that's okay.

Mr BROCK: That's fine, Madam Chair. I didn't want to lose the opportunity to bring it to the attention of the committee whilst it is in this consultation period. Even though it is not directly addressing the comments in the draft plan, I needed to get that onto the agenda so that we do not lose the opportunity to at least explore the potential.

54 The PRESIDING MEMBER: Thank you very much. Do we need to formally accept Geoff's film?

Moved Hon. G. Kandelaars.

Seconded Mr Pegler.

Carried.

THE WITNESS WITHDREW